

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

HEIDER et al.

Appl. No. 10/052,641

Filed:

January 23, 2002

For:

Method for Diagnosis and

Therapy of Hodgkin's

Lymphomas

Confirmation No. 3959

Art Unit:

1642

Examiner:

To be assigned

AFCENTED SON Attv. Docket: 0652.1910001/EKS/PSC

Information Disclosure Statement

Commissioner for Patents Washington, D.C. 20231

Sir:

TEGRALLE

Listed on accompanying Form PTO-1449 are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. A copy of each of these documents is provided.

In accordance with 37 C.F.R. § 1.98(a)(3), Applicant's undersigned representative submits the following concise explanation of the relevance of the non-English language documents. Document Nos. AO1, AP1 and AL2, cited on form PTO 1449:

Document AL1, European Patent Publication No. 0 531 300 B1 is in the German language. Document AL1 relates to variant CD44-surface proteins and cDNA sequences and antibodies for proteins for use in diagnosis and therapy for tumor metastases. An English language abstract of this document is provided as Document AR16;

Document AM1, European Patent Publication No. 0 538 754 A2 is in the German language. Document AM1 relates to the use of variant CD44 mammalian cell surface protein antibodies to prepare compositions suppressing the immune response in mammals. An English language abstract of this document is provided as Document AS16;

Document **AP1**, PCT Patent Publication No. WO 95/00851 is in the German Language. Document **AP1** relates to antibodies and nucleic acids encoding the epitopes used in the diagnosis and/or analysis of tumors by detecting at least one variable exon of the CD44 gene or corresponding epitope. An English language abstract of this document is provided as Document **AT16**.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached PTO-1449 based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith. It is further understood that the Examiner will consider information that had been cited or submitted to the U.S. Patent and Trademark Office in a prior application relied on under 35 U.S.C. § 120, 1138 OG 37, 38 (May 19, 1992).

HEIDER *et al.* Appl. No. 10/052,641

This Information Disclosure Statement is being filed more than three months after the U.S. filing date, but before the first mailing of an Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449, and to indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted.

STERNE, KESSLER, GQLDSTEIN & FOX P.L.L.C.

Eric K. Steffe

Attorney for Applicants Registration No. 36,688

Date: 8/14/02

1100 New York Avenue, N.W.

Suite 600

Washington, D.C. 20005-3934

(202) 371-2600

ODMA MHODMA:SKGF_DC1:39186:1

32	<u>\$</u>								Page 1 of 1
3. W. 8 11	RADEMI				ATTY. DCCKET NO. 0652.1910001/EKS/	PSC	1	ICATION N 52,641	О.
		FORM	PTO-1449		APPLICANT	100	10,0	32,011	
INF	FORMATI	ON DIS	SCLOSURE STA	ATEMENT	HEIDER et al.		1		
					FILING CATE January 23, 2002		GRCUI 1642	P	
				U.S.	PATENT DOCUMENTS				
XAMINEF.			-"						
NITIAL			CUMENT IBER	DATE	NAME	CI	ASS	SUB- CLASS	FILING DATE
	AA								
	AF					9.0			KY —
	AC	_						<u> </u>	A Color
	AI)		-	ļ				1.cx	
	AF.	-						\swarrow	
	AF	+			TECU 1			1 1/2 (A)	3 28 · ·
	AG AH	-		 				 `	-Ch
	AI	+							CK
	A.T	+-			-		-	1 1	Ş ·
	AE.	_		<u> </u>				······	
	<u> </u>			FOREI	GN PATENT DOCUMENTS				
XAMINEF.				T					
NITIAL			CUMENT IBER	DATE	COUNTRY	CL	ASS	SUB- CLASS	TRANSLATI ON
		-	0 531 300,	03, 17, 1993	Europe				Ven
	AL1	B1						<u> </u>	110
	AM1	EF A2	0 538 754	04, 28, 1993	Europe	ŧ			Yes D
	Art	_	94,'02633	02,03,1994	WIPO				Ves
	AN1	A1	·					 	
	A01	W-D A 1	94/12631	06, 09, 1994	WIPO				Yes
			95,'00851	01,05,1995	WIPO				Yes
	AP1	A1							X110
			OTHER (Incl	luding Author	, Title, Date, Pertin	ent Pages,	etc.)		
	AF.	1	Antibodie	s for Radioim	"Clinical Experience munotherapy: Results ety of Nuclear Medici	of Phase I	um-196 Trial	-Labeled s," J. No	Monoclonal ucl. Med.
	AS	1	Intrageri	toneal Rheniu	"Pharmacckinetics and m-186-Lakeled Monoclo clear Medicine (May 1	onal Antibo	gan Do	osimetry F J. Nucl. M	Following Med. 36:754-
	AT	1			., "Idiotypic antiboo 8:75-82, Springer-Ver		erapy	of cancer	c," Cancer
XAMINEF.		_L	1			[;ATI	E CONS	IDERED	
XAMINER:	Initia	l if r	reference co	onsidered, whe	ether or not citation d not considered. In	is in conf	orman	ce with M	IPEP 609. Draw

age of species

AUG 1 3 2002 3349

CAY & TRAD	EW.								Page 2 of 16
a Inn				· · · · · · · · · · · · · · · · · · ·	ATTY. DOCKET NO. 0652.1910001/EKS/PSC			ICATION N 52,641	· C .
INTE			PTO-1449	TEMENT	APPLICANT HEIDER et al.				
TINEC	JRMATIC	W DIS	CLOSURE STA	<u> 1 EMENT</u>	FILING DATE January 23, 2002		GROUI 1642	J.	
	•			U.S.	PATENT DOCUMENTS				
EXAMINER INITIAL		DOC	UMENT BER	DATE	NAME	CL	ASS	SUB - CLASS	FILING DATE
	ΑA								
	Al-							1	·¥
	AC				gradient de la companya de la compan			12	12 0
	AI+							\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	10 103 - 103
	AE				**************************************	_			3 32
	AF.	<u> </u>				-	\rightarrow	Y So	-
	ZAC+	 				-	_	1 8	
	AH	 				<u> </u>		1 2	
	Al Al	+			-	_		+ 40	
	At.	+				_		 `	
	.1 51:			FORETG	N PATENT DOCUMENTS			- L	
EXAMINER		T		TORETO	TATANT BOOMENTO				
INITIAL	<u> </u>	DOC NUM	UMENT BER	DATE	COUNTRY	CL	ASS	SUB- CLASS	TRANSLATION
	AL2	WO A1	95/00658	01/05/1995	WIPO			—	Yes XM
	ΑM								Yes No
	All								Yes No
	AO								Yes No
	Aŀ								Yes No
	AF	<u>. I</u>	OTHER (Inc.)	uding Author	Title, Date, Pertinent P	ages.	etc.)		<u> </u>
	AF.	2	antibody (Acad. Sci Ermak, G. Papillary	genes in Esche . USA 87:1066-	"A rapid method of cloning richia coli as single-cha 1070, National Academy Prestricted Patterns of CD44 noma," Cancer Res. 56:103	in immess (1	nunoto 1990) 	xins," Pi	roc. Natl.
	AT	<u>2</u>	Fox, S.B. Wilkens (4 and cancer screening,"	Lance	342:	548-549,	Williams &
EXAMINER						DATE	CONS	IDERED	

FORM PT0-1449

	· "
HEILER et al.	
APPLICANT	
0652.1910001/EKS/PSC	10/052,641
ATTY. DOCKET NO.	APPLICATION NO.

TNI	FOF.MATI	ON DI	SCLOSURE_S	STATEMENT	HEILER et al. FILING DATE		GEOU	p.	
	· ·				January 23, 2	002	1:42		
				U	.S. PATENT DOCUMENT:	s	1	1	
EKAMINER INITIAL			CUMENT MBER	DATE	NAME		CLASS	SUB- CLASS	FILING DATE
	AA								
	АВ				and the second of the second	and the second			YY
	A 1					,	<u> </u>	77,	2 2
	AI)		.=					X	\$3,
	AE						-	\mathcal{O}	
	AF				7. 1	. ,		1 %	3
	Ail.						<u> </u>	\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \	***
	AΗ		<u>.</u>				ļ	25	34
	AI		· · · · · · · · · · · · · · · · · · ·					140	
	A, -								
	AH								
				FOR	EIGN PATENT DOCUMEN	TS	1		
MAMINER NITTAL			CUMENT MBER						TRANSLATION
	AL								Ye Ye
	AI1								Xe
	A:								Ye 11
	A.		. <u>-</u> -					-	Уe
	AΘ	 							Ye
	A!					<u> </u>	1	J	110
		T.::	OTHER (In	cluding Auth	or, Title, Date, Pe	rtinent Pag	es, etc.)		
	AF	3	Multiple		'Normal Human Tissue 2D44 Isoforms," <i>Cand</i> (1994)				
	AS	3	but not	Friedrichs, K., et al., "CD44 Isoforms Correlate with Cellular Differentiation but not with Prognosis in Human Breast Cancer," Cancer Res. 55:5424-5433, American Association for Cancer Research (November 1995)					
	TA	3	Malignar	it Lymphomas:	, "Expression of a Felevance to Prima Kayama 47:215-222, C	ır; Site, Hi	stologica	il Subtype	and Clinical
XAMINER		1					DATE CONS	IDERED	



INFOFMATION DISCLOSURE STATEMENT

	APPLICATION NO. 10/052,641
APPLICANT HEIDER et al.	
	[

GROUP FILING DATE January 23, 2002 1642 U.S. PATENT DOCUMENTS RAMINER DOCUMENT DATE NAME CLASS SUB-FILING DATE INITIAL CLASS NUMBER AiAΒ Α, ΑU AΞ AFA.: AH $A \perp$ $_{A}$. Zi i FOREIGN PATENT DOCUMENTS EXAMINER INITIAL DOCUMENT DATE COUNTRY CLASS SUB-TRANSLATION CLASS NUMBEF. Yes 110ΑL Yes 110 $A\Gamma$ Yea K!No Yes 110A. Ye.s No Aī OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Ghaffari, S., et al., "Differentiation-Associated Changes in CD44 Isoform Expression During Normal Hematopoiesis and Their Alteration in Chronic Myeloid ΑF 4 Leukemia, " Blood 86:2976-2985, W.B. Saunders Company (October 1995) Ginthert, U., et al., "A New Variant of Glycoprotein CD44 Confers Metastatic A5 4 Potential to Rat Carcinoma Cells, Cell 65:13-24, Cell Press (1991) Gura, T., "Systems for Identifying New Drugs Are Often Faulty," Science 278:1041-AT 4 1042, American Association for the Advancement of Science (November 1997) DATE CONSIDERED EXAMINER



FCRM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0652.1910001/EKS/PSC	APPLICATION NO. 10/052,641
APPLICANT HEIDER <i>et al</i> .	
FILING DATE	GROUP

					FILING DATE January 23, 200	GROU 2 1642		
				ប	.S. PATENT DOCUMENTS			
EKAMINER INTTIAL			UMENT IBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA					· · · · · · · · · · · · · · · · · · ·		
	АВ	_	_			<u>.</u>		Σ
	AC						11/2	4
	GA							101 10 10 10 10 10 10 10 10 10 10 10 10
	EA	\downarrow	_					3 303
	AF						\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1202
	AG						1,0	16
	AH						<	<u>3</u>
	ΑÏ						-c's	<u>' </u>
	AJ						1/3	
	AK.							
				FOR	EIGN PATENT DOCUMENTS			
EXAMINER INITIAL			'UMENT IBER	DATE	COUNTRY	CLASS	SUB- CLASS	TF.ANSLATION
	AL							. 11 Де
	AM.							Ye 11
	AN		·					Yes
	1	<u> </u>						Ye.
	AD:	 -						Ye
	AΘ							11:
		•	OTHER (Inc	luding Auth	or, Title, Date, Pert	inent Pages, etc.)		
	AF.	<u>5</u>	Variant o	of CD44 Is E	1., "A Human Homologue Expressed in Colorecta 133, The Rockefeller U	l Carcincmas and A	Adenomato.	
	AS	<u>5</u>	Heider, F	KH., et al as," <i>Vircho</i> w	., "Expression of CD4 ss. Arch. 428:267-273,	4 isoforms in huma Springer-Verlag (δ	an r⊕nal : July 199€)	cell
	TA	<u>Ei</u>	Homologou	is Sequences	"CD44 Splice Variant Are Expressed in Hum an Association for Ca	an Tumor Cell Line	es," Cance	or in Rats: er Res.



FORM PTC-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0652.1910001/EKS/PSC	APPLICATION NO. 10/052,641
AFPLICANT HEIDER et al.	
FILING DATE	GROUP

NUMBER AA AB AC AD AE AF AG AG AH AI AI AI AX FOREIGN PATENT DOCUMENTS		?	GROUI 1642	TE 3, 2002	FILING January			·		
NUMBER AA AB AB AC AD AC AD AC AD AC AC AD AC AC				MENTS	S. PATENT DO	υ.				
AB AC AD AD AD AB AF AG AF AG AH AI AI AL AN AC EMAMINER RHITIAL DOCUMENT NUMBER DOCUMENT NUMBER DOCUMENT NUMBER AD AN AN AN AN AN AN AN AN AN	ING DATE		CLASS		NAME	DATE				
AC AD AE AP AND	<u> </u>								AA	
AD AE AF AG AF AG AH AI AI AX POREIGN PATENT DOCUMENTS EXAMINER ALL AND AND OTHER (Including Author, Title, Date, Pertinent Pages, etc.) TRAL CLASS SUB- CLASS AD AND OTHER (Including Author, Title, Date, Pertinent Pages, etc.) AG AD AF OTHER (Including Author, Title, Date, Pertinent Pages, etc.) AG AF AF AF AF AF AF AF AF AF	-0	<u> </u>							AB	
AS AF AG	Lis. a	L-C\(\sigma\)							AC	
AP AG AH AT AN AN AN AN AN AN BOCUMENT DOCUMENT DOCUMENT DOCUMENT NUMBER AD AN AN AN AN AN AN AN AN AN	-62		ļ						AD	
AG AH A: AE FOREIGN PATENT DOCUMENTS *** *** *** *** *** *** ***	48/0	Q ~ ,3							AE	
AH AI AI AI AX FOREIGN PATENT DOCUMENTS IMMINER HITTAL DOCUMENT DATE COUNTRY CLASS SUB-CLASS AL AM AN AN AN AN AN AN AN AN AN	<u> </u>	, ×			<u> </u>				AF	
AR A: AX FOREIGN PATENT DOCUMENTS EAMINER NUMBER AL AN AN AN AN AN AN AN AN AN	<u>/</u>								AG	
FOREIGN PATENT DOCUMENTS EXAMINER HITTAL AL AN AN AN AN AN AN AN AN		1			7		·		AH	
FOREIGN PATENT DOCUMENTS EAMINER MITHAL DOCUMENT NUMBER AL AM AN AN AN AN AN AN AN AN AN		\ <u>\</u>		·					AI	
THER (Including Author, Title, Date, Pertinent Pages, etc.) OTHER (Including Author, Title, Date, Pertinent Pages, etc.) AR 6 Horst, E., et al., "Expression of a Human Homing Ecceptor (CD44) in Lympho: Williams & Wilkins (1990) AS 6 Lymphoma: Expression of a Human Homing Ecceptor (CD44) in Lympho: Williams & Wilkins (1990) AS 6 Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphocyte Homing Recep		<u> </u>	ļ						Acī	
DOCUMENT NUMBER AL AM AN AN AN AN AN AN AN AN AN									AK	
DOCUMENT NUMBER DOCUMENT NUMBER AL AM AN AN AN AN AC AP OTHER (Including Author, Title, Date, Pertinent Pages, etc.) ### OTHER (Including Author, Title, Date, Pertinent Pages, etc.) AR 6 Milignancies and Related Stages of Lymphoid Development, " Leukemia 4:383-: Williams & Wilkins (1990) AS 6 Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44) in Lymphocyte Homing and ICAM-1 (CD54), " Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Lecture CD44 Generated by Insertions at a Single Site in the Extracellular Domain," Bjol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecules and Mole				UMENTS	IGN PATENT I	FORE				
OTHER (Including Author, Title, Date, Pertinent Pages, etc.) AR 6 Horst, E., et al., "Expression of a Human Homing Receptor (CD44) in Lympho: Milignancies and Related Stages of Lymphoid Development," Leukemia 4:383-1: Williams & Wilkins (1990) AS 6 Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, 1 and ICAM-1 (CD54)," Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing is CD44 Generated by Insertions at a Single Site in the Extracellular Domain." Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecular CD54 (CD54) an	NCITALE I	T I	CLASS		COUNTRY	DATE				
OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Horst, E., et al., "Expression of a Human Homing Ecceptor (CD44) in Lympho: Milignancies and Related Stages of Lymphoid Development," Leukemia 4:383-1: Williams & Wilkins (1990) AS 6 Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, 1 and ICAM-1 (CD54), "Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Lecceptor (CD44) and ICAM-1 (CD54), "Leukemia 4:595-599, Williams & Wilkins (1990)	Ves No								AL	
OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Horst, E., et al., "Expression of a Human Homing Ecceptor (CD44) in Lympho: Malignancies and Related Stages of Lymphoid Develorment," Leukemia 4:383-1: Williams & Wilkins (1990) AS 6 Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, land ICAM-1 (CD54), "Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Lecceptor (CD44) Generated by Insertions at a Single Site in the Extracellular Domain, "Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecules in the Extracellular Domain, "Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecules in the Extracellular Domain, "Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecules in the Extracellular Domain, "Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecules in the Prognosis of Diffuse Large-Centry (CD44) (CD54), "Leukemia 4:595-599, Williams & Wilkins (1990)	Ye: No								MA	
OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Horst, E., et al., "Expression of a Human Homing Receptor (CD44) in Lympho: Malignancies and Related Stages of Lymphoid Development," Leukemia 4:383-1: Williams & Wilkins (1990) Horst, E., et al., "Adhesion Molecules in the Prognosis of Diffuse Large-Ce Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, 1 and ICAM-1 (CD54)," Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Le CD44 Generated by Insertions at a Single Site in the Extracellular Domain," Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecular	Yes No								A11	
OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Horst, E., et al., "Expression of a Human Homing Receptor (CD44) in Lympho: Malignancies and Related Stages of Lymphoid Development," Leukemia 4:383-1: Williams & Wilkins (1990) Horst, E., et al., "Adhesion Molecules in the Prognosis of Diffuse Large-Ce Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, 1 and ICAM-1 (CD54)," Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Le CD44 Generated by Insertions at a Single Site in the Extracellular Domain," Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecular Company of the Biochemistry of the Biochemis	Yes No								AO	
Horst, E., et al., "Expression of a Human Homing Receptor (CD44) in Lympho: Malignancies and Related Stages of Lymphoid Develorment," Leukemia 4:383-1: Williams & Wilkins (1990) Horst, E., et al., "Adhesion Molecules in the Prognosis of Diffuse Large-Ce Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, 1 and ICAM-1 (CD54)," Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Le CD44 Generated by Insertions at a Single Site in the Extracellular Domain," Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecular	Yes No								AP	<u> </u>
Horst, E., et al., "Expression of a Human Homing Receptor (CD44) in Lympho: Malignancies and Related Stages of Lymphoid Development," Leukemia 4:383-1: Williams & Wilkins (1990) Horst, E., et al., "Adhesion Molecules in the Prognosis of Diffuse Large-Ce Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, 1 and ICAM-1 (CD54)," Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Le CD44 Generated by Insertions at a Single Site in the Extracellular Domain," Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecular			es, etc.)	, Pertinent Page	r, Title, Da	uding Autho	OTHER (Inc.			
AS 6 Lymphoma: Expression of a Lymphocyte Homing Receptor (CD44), LFA-1 (CD11a, 1 and ICAM-1 (CD54), " Leukemia 4:595-599, Williams & Wilkins (1990) Jackson, D.G., et al., "Multiple Variants of the Human Lymphocyte Homing Let CD44 Generated by Insertions at a Single Site in the Extracellular Domain," Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecular Domain (CD44).	c :.d [∃Э.	CD44) in Ly eukemia 4:1	eceptor (rment," <i>L</i>	a Human Homing E Lymphoid Develo	ted Stages	ies and Rela	Malignanc	<u>6</u>	AR	
AT 6 CD44 Generated by Insertions at a Single Site in the Extracellular Domain," Biol. Chem. 267:4732-4739, The American Society for Biochemistry and Molecular Domain,"	Cali ,13 ,	, LFA-1 (CI	cr (CD44)	e Homing Recept	of a Lympho	Expression	Lymphoma:	<u>6</u>	AS	
	, " .J.	ellular Dom	he Extrac	Single Site in t	ertions at a	cated by Ins n. <i>267</i> :4732-	CD44 Gene: Biol. Che	<u>6</u>	AT	
EXAMINER EATE CONSIDERED		IDERED	CATE CONS	1						EXAMINER



APPLICANT	ATTY. DOCKET NO. 0652.1910001/EKS/PSC	APPLICATION NO. 10/052,641
HEIDER et al.	111111111111111111111111111111111111111	

INI	ORMATI	ON DI	SCLOSURE :	STATEMENT	HEIDER et al.			
					FILING DATE January 23, 2002	l l	KOUP 642	
				Ū	.s. patent documents			
EXAMINER INITIAL	DOCUMENT DATE NUMBER				NAME	CLAS	SUB- CLASS	FILING DATE
· ·	AA							7
	ΑВ							70
	Ai.							
	AL)				* .			
	All							
	AF	_					~	8 2
	AC				aprijere in the		 -	1.25
	AH	_						(Z)
	Al							<u> </u>
	A.:	_						
	AE						L	
	1	1		FOR	EIGN PATENT DOCUMENTS	· · · · · · · · · · · · · · · · · · ·	Ī	
XAMINER NITIAL			CUMENT MBER	DATE	COUNTRY	CLAS	SUB CLASS	TRANSLATI)N
								Y'65
	AL	<u> </u>						110
	AI1	İ						Ye.
	1							Ye
	AH	<u> </u>						110
	ΑO							110 A 4
	AP							Ye:
			OTHER (I	ncluding Auth	or, Title, Date, Pertir	ent Pages, et	c.)	
	AF.	7	Jain, R Scienti	.K., "Barrier fic American,	es to Drug Eelivery in S Inc. (1994)	Solid Tumors,"	Sci. Am. 2'	71:58-65,
	AS	7	Lymphom	n, S., et al. a," <i>J. Clin.</i> gation, Inc.	, "Lymphocyte Homing as Invest. 87:1835-1840, 5 (1991)	nd Clinical Be The American S	havior of No ociety for (on-Hodgkin's Clinical
***	АТ	7	Murine,	Chimeric, or	"Treatment of Non-Hodg Humanized LL2, an Anti 9s-5907s, American Asso	i-CD22 Monoclo	nal Antibody	y," Cancer
XAMINER		1	1			DATE C	ONSIDERED	



INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0652.1910001/EKS/PSC	APPLICATION NO. 10/052,641
APFLICANT HEIDER et al.	
	1

					FILING DATE January 23, 2002	GROU 1642		
				ט	.S. PATENT DOCUMENTS			
EXAMINER INITIAL			UMENT BEF	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
	AA							
	AR							
	Α.							
	A!						\\(\alpha\)	1 500
	AE						\downarrow , \bigcirc	2 20%
-	AF				·			(4)
	A(+	ļ					K. 6	
	AH							(3)
	A:	_					 	\$
	ΑΙ							3
	AE.		-				,	
				FOR	EIGN PATENT DOCUMENTS			
EXAMINER INITIAL	_		CUMEINT IBEF.	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION
	A!							Ver No
- 	AH							Yes No
	.:A							Mes No
	A· ·							Yes No
-	A:							Yes No
-			OTHER (Inc	luding Auth	or, Title, Date, Perti	inent Pages, etc.)		
	AF	<u>ε</u>	Kaufmann, length of	M., et al. survival,	, "CD44 variant exon of Lancet 345:615-619, "	epitopes in prima The Lancet, Ltd.	ry breast (March 199	cancer and 5)
	ΑS	<u>ε</u>	Lymphomas	Express a	"Activated Human Lym Homologue of the Rat ! -904, The Fockefeller	Metastasis-associ	ated Varia	-Hodghin's nt of CD44,"
	AT	<u>&</u>	Mackay, C Humans,"	r.R. et al., J. Cell. Bi	"Expression and Modu ol. 124:71-82, The Roo	lation of CD4+ Va ckefeller Univers	riant Isof ity Press	orms in (1994)
EXAMINER		<u> </u>	<u> </u>			DATE CONS	 SIDERED	<u>-</u>



FORM PT0-1449

INFORMATION DISCLOSURE STATEMENT

HEIDER et al.	
APPLICANT	
0652.1910001/EKS/PSC	13/052,641
ATTY. DOCKET NO.	APPLICATION NO.

FILING DATE GROUP January 23, 2002 1642

			-	<u></u> .	January 23, 20	002	1542		
				ប.ន	. PATENT DOCUMENTS	5			
EXAMINER INITIAL		DOC' NUM	UMENT BER	DATE	NAME		CLASS	SUB- CLASS	FILING DATE
	AA								\circ
	AB				<u> </u>			<u> </u>	1
	A.:						_	12	(3) (2)
	Al+							C.X.	1. J. J.
	AE								. 33
	AF				=		L Q	1 %	18
	AC.							, V.	
	ΑН						<u> </u>	<u> </u>	72
	1A								
	Α-					218			
	Alf								
				FORE	GN PATENT DOCUMEN	TS	,		
EXAMINEF. INITIAL		DOC.	UMENT BEF	DATE	COUNTRY		CLASS	SUB- CLASS	TRANSLATION
	Ai.								У с. 11
	AM.								Ye N
	A::								Ye: No
	A: :					-			Ye.
	Αŀ								Ye:
	_		OTHER (Inc	luding Author	, Title, Date, Per	rtinent Page	es, etc.)		<u></u>
	AF	ها	normal an	d malignant E	Venular endotheliu 3-zell populations -313, Springer-Ver	. A compar	olecules ative stu	CD44 and I	LECA'1-1 in nows Arch. A.
	ΑC	<u>g</u>	Mulder, J	W.R., et a. g CD44 prote:	l., "Colorestal ca ins," <i>Lancet 344</i> :1	ncer progno 470-1472, T	sis and e he Lancet	xpression , Ltd. (19	of ∃xon-v6- 994)
	AT	<u>Ç</u> ŧ	Pals, S.T Dissemina (1989)	on, et al., "I etion in Non-H	Expression of Lymp Hodgkin's Lymphoma	hocyte Homi ," <i>Blood 73</i>	ng Recept :885-888,	or as a Me Grune & ?	echamism of Stratton

EXAMINER

DATE CONSIDERED



INFORMATION DISCLOSURE STATEMENT

ATTY: DOCKET NO: 0652:1910001/EKS/PSC	APPLICATION NO. 10/052,641
APPLICANT HEIDER et al.	
_	

			CTOPOKE 21		FILING DATE January 23, 2002		GROU 1642		
				U.S.	PATENT DOCUMENTS				
EXAMINER INITIAL		1	UNENT BER	DATE	NAME	C	LASS	SUB- CLASS	FILING DATE
	AA	-						 	Q
	AB	-			 	- 1		 	$\Psi_{2} = \frac{1}{2}$
 -	A .	-						+ 12	1 8 3
	AD AD	-	_					(3)	10 2 - 2
	AE AF	<u> </u>	<u> </u>					K/ S	
***	AG							4 67	1.2
	AH	+-	·	-					100
	AI		III. I		· · · · · · · · · · · · · · · · · · ·				\$
	AJ	_						 	
	AK	<u> </u>		-					
7				FOREIG	N PATENT DOCUMENTS	<u> </u>		<u> </u>	
EXAMINER INITIAL		DOC	UMENT BER	DATE	COUNTRY	GI	LASS	SUB- CLASS	TRANSLATION
	Al.								Ye.s Uc
	Alī								Yes No
	A:I								Yes Ho
	A()								Yes No
	AP								Yes No
			OTHER (Inc	luding Author,	Title, Date, Pertiner	nt Pages,	etc.)		
	AF	10	Hodgkin's	J.J., et al., ' S Lymphoma," Ar Sts (1988)	"Expression of Lymphoc". J. Pathol. 130:496-	yte Homin 504, Amer	eg Rece Tican A	eptor Antiques	gen in Non- n of
	AS	10	autologou	is stem cell ti	Phase II trial of "I ransplantation for rel t, Ltd. (August 1995)	-B1 (anti apsed B c	-CD20) cell ly	antibody mphomas,"	therapy with Lancet
	AT	10	Immunocon	S.M., et al., ' jugates in Nuc ledicine, Inc.	"Evaluation of Indium- de Mice and Dogs," J (1993)	lll- and Nucl. Med	Yttriu 1. 34:9	m-90-Labe 38-945, Tl	led Linker- he Society cf
EXAMINER		1				DAT	E CONS	IDERED	

AUA	1 3 SOO	OFFICE D							Page 11 of 15
Car	& TRADEN	, rec			ATTY: DOCKET NO 0652.1910001/ER			ICATION NO	
		FORM	PTO-1449		AFPLICANT				
<u>INF</u>	ORMATIC	ON DI	SCLOSURE ST	ATEMENT	HEIDER et al.		GROU	P	
. 1.					January 23, 200)2	1642	· · · · · · · · · · · · · · · · · · ·	
	T	T	-	U.S.	PATENT DOCUMENTS				1
EXAMINER INITIAL		- 1	JUMENT ABER	DATE	NAME	c	LASS	SUB- CLASS	FILING DATE
	AA	ļ			<u> </u>				0
	AB			-	1			 	4 ~
	AC	+						+ ~	
	AD	+		-				1	5 55
	AE AF							170	
	AG	+			-			Q §	3 X
	AH								R
	AI								3
	AJ								*
	AK								
				FOREI	GN PATENT DOCUMENTS	5			
EXAMINEF: INITIAL			JUMENT 1BER	DATE	COUNTRY	C	LASS	SUB- CLASS	TRANSLATION
	AL								Yes No
	AM								Ye.s No
- · · -	INA								Yes No
	AO	ļ							Yes No
	AP								Yes No
			OTHER (Inc.	luding Author	, Title, Date, Peri	tinent Pages,	etc.)		
	AR	11	Eistamäki Treatment	, R., et al., Response," <i>E</i>	"Serum CD44 in Ma lood 84:238-243, W	lignant Lympl .B. Saunders	noma: A Compan	An Associa ny (1994)	tion With
	AS	11	Associati	on with Low H	"CI44v6 Expression istological Grade (n in Non-Hodg and Poor Prog	gkin's gnosis,	Lymphoma: " J. Path	an ol. 176:259-
	AT	11	Lymphomas	: Characteriz	lternatively Splice ation and Comparise s," <i>Blood 82</i> :3539-	on With Norma	al Acti	.vat.ed B 🖺	ells and
EXAMINEF.		1	1		·	DAT	re cons	IDERED	
	T				attender not ditati	ion is in ser	former	co with M	DED 609 Draw



FORM PTC-1449

INFORMATION DISCLOSURE STATEMENT

	anciin
APPLICANT HEIDER et al.	
 	
0652.1910001/EKS/PSC	10/052,641
ATTY. DOCKET NO.	APFLICATION NO.

		,,,			FILING DATE January 23,		GRCU 1642		<u> </u>
				U. S	S. PATENT DOCUME	ENTS			
EXAMINER INITIAL		DOC	UMENT BER	DATE	NAME		CLASS	SUB CLASS	FILING DATE
	ΑA	\perp		<u>.</u>					_
·	Air	-				* ****			Elates Control
	A.T.						-	+ ×	<u> </u>
	AD:	-					 	 ~\\	1956 26
	AH	+		_	- 				12 200
	AF							40° 00°	(3) (3) (3) (4)
	Ar :	+-			Market Control		+	- V-	1.20
	АН	+-					 		(3)
	AI AC	+					+	+ -45	
	AE.				-		 	-	
	I Ar.			FORE	IGN PATENT DOCU	MENTS		<u> </u>	
EXAMINES.		<u> </u>		FORE	IGN PATENT DOCUM	MENTS			
INITIAL			UMENT BER	DATE	COUNTRY		CLASS	SUB- CLASS	TRANSLATION
									Yes
·	AL	-		<u> </u>				+	No
	A.						1		Yes No
		<u> </u>		···					Yes
	AI:					<u> </u>			011_
	A^{-}								Yes No
	- A	+					 		Yes
	Ai								011
			OTHER (In	cluding Autho	r, Title, Date,	Pertinent Pag	res, etc.)	-	
	AF	12	Savage, protein,	P., et al., " " Br. J. Cand	A recombinant ser 67:304-310,	ingle chain ar Macmillan Pres	ntibody in	nterleukin- (1993)	2 fusion
	A£	12	receptor	CD44 reveals	., "Genomic str at least 12 al 64, National Ac	ternatively sp	oliced exc	the lympho	ocyte homing Natl. Acad.
	ΑT	12	Restrict Homing R	ed Tissue Exp $_{ m eceptor}$," $_{ m J}$.	., "The Identif ression in Tran <i>Biol. Chem. 268</i> cular Biology,	scripts Encodi :12235-12238,	ing the Mo	ouse Pyp-1	(CD44)
EXAMINER		<u> </u>			·-	Ī	DATE CONS	SIDERED	

Page 13 of 16

	ENT & T	<u> </u>							Page 13 of 16
			PTO-1449		ATTY. DOC 0652.1910	KET NO. 001/EKS/PSC		ICATION NO	o.
					APPLICANT HEINER et				
INF	FORMATIO	ON DIS	SCLOSURE S	TATEMENT	FILING DA	re	GFOU 1€42		
				ט	S. PATENT DOCUM	MENTS			
EXAMINEF. INITIAL			'UMENT IBER	DATE	NAME		CLASS	SUB CLASS	FILING DATE
	AA								
	AB					<u> </u>		1	ENTER 16001250
,	AT	\perp			1		f	BEU	100
	AD	+						0110	5 2002
	AE.	-				. <u>. </u>	.	HOG	1201000
	AF'							. ~ ?	THER TENUIES
	AB						- -	1ECH V	
	AH	+	1.10					+	-
	AI	+						-	
	A.J	-						+	
	AK			FOR	EIGN PATENT DOC	ITMENITC			
EXAMINES.		7		FOR	EIGN FRIENT DOC	OHENTS			
INITIAL.			UMENT IBER	DATE	COUNTRY		CLASS	SUB- CLASS	TRANSLATION
	AL.								Yes No
	AM.		-						Yes No
	A:v								Yes No
	ΑI								Yes No
	AP						ļ		Yes No
			OTHER (Ir	cluding Auth	or, Title, Date	, Pertinent P	ages, etc.)		•
	AF	13	Seaver, Thought,	S., "Monoclo " Genet. Eng	nal Antibodies . News 14:10,21	in Industry: , Mary Ann Li	More Difficebert, Inc	cult Than . (1994)	Originally
	AS.	13	Seiter, CD44,"	S., et al., 7. Exp. Med.	"Prevention of 177:443-455, Th	Tumor Metasta e Rockefeller	asis Format: University	ion by Ant γ Press (1	i-Variant 993)
	ΑT	13	Stamenko Is a Men (1)89)	ovic, I., et nber of the C	al., "A Lymphoc artilage Link F	ryte Molecule Protein Family	Implicated	in Lymph :1057-1062	Node Homing , Cell Press
EXAMINER	<u> </u>	.1	<u> </u>				DATE CONS	SIDERED	· · · · · · · · · · · · · · · · · · ·
EXAMINER: line throug communicati	h citat	ion i	f not in	considered, conformance	whether or not and not conside	citation is i red. Include	n conforman	ice with M	PEP 609. Draw ith next

Page 14 of 16

FORM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0652.1910001/EKS/PSC	APPLICATION NO. 10/052,641
AFPLICANT HEIDER et al.	

GROUP FILING DATE January 23, 2002 1642 U.S. PATENT DOCUMENTS EXAMINER DATE NAME CLASS SUB-FILING DATE INTTIAL DOCUMENT NUMBER CLASS RECTENTED TO TECH CENTER TO TECH CEN ΑÀ AFAir. ADΑE AFΑG ΑН A.I $\mathbf{A}_{t}\mathbf{I}$ AEFOREIGN PATENT DOCUMENTS EXAMINER DOCUMENT COUNTRY CLASS SUB-TRANSLATION INTTIAL DATE NUMBER CLASS ¥ев 110 ALYes AI-1 110 Yes 110 Yes 110AO Yes A: OTHER (Including Author, Title, Date, Pertinent Pages, etc.) Stauder, R., et al., "CD44 Variant Isoforms in Non-Hodgkin's Lymphoma: A New Independent Prognostic Factor, " Blood 85:2885-2899, W.B. Saunders Company (May AR 14 Tanabe, K.K., et al., "Expression of CD44R1 adhesion molecule in colon carcinomis AS 14 and metastases," Lancet 341:725-726, Williams & Wilkins (1993) Terpe, H.-J., et al., "CD44 variant inoforms are preferentially expressed in basal epithelial of non-malignant human fetal and adult tissues," Histochemistry ΑT 14 101:79-39, Springer-Verlag (1994) DATE CONSIDERED EXAMINER

Page 15 of 16

/	OLP E JOY	<u> </u>
	AUG 1 3 2002	SFFICE.
\3	TO THADEMAN	c/

FOEM	PTO.	14	49

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO. 0652.1910001/EKS/PSC	APPLICATION NO. 1(/052,641		
APPLICANT HEIDER et al.			
FILING DATE	CHOTE		

INF	ORMATIC	IN DIS	CLOSURE SI	ATEMENT	HEIDER et al.				
					FILING DATE January 23, 2002	I	GEOUP 1642		
				U.S.	PATENT DOCUMENTS	-			
EXAMINER INITIAL		DOCI	UMENT BEF:	DATE	NAME	CLASE	SUB- CLASS	FILING DATE	
	AA				· -				
	АВ							20	
	AC				j			CHIVER FEAT	
	AΓ							120	
	ΑE						200	2,11,	
	AF					<u> </u>	$\Phi_{\mathcal{K}}$	J STON	
	AG				للمعاديث والمالية المالية		, DI.	CER 15	
	АН			<u> </u>				EMI.	
	ΑI							4 5	
	АJ						1/60		
	AE							<u></u> .	
			·	FOREIG	N PATENT DOCUMENTS				
EXAMINER INTTIAL		DOCU	UMENT BEF	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION	
	AL2							Х1 Х1	
	AM							_ <u>н</u>	
	AM							Ye N	
_	A O							Ye Ye	
	AF							Ye.	
		(OTHER (Inc	luding Author,	Title, Date, Pertinent Pag	es, etc.)			
Thomas, G.D., et al., "Antibodies for tumour immunodetecting antibody radiolabelling," in Antibodies. Volume II. A Fractic II, Catty, D., ed., IRL Press, Oxford, UK, pp. 223-244 (1989) Tölg, C., et al., "Splicing choice from ten variant excns est variability," Nucl. Acids Res. 21:1225-1229, Oxford Universit						. A Prac	tical Appro	ods for each, Volume	
						establishes sity Press	: CD44 (1993)		
	AT	<u>15</u>	Vriesendorp, H.M. et al., "Review of Five Consecutive Studies of Radiolabeled Immunoglobulin Therapy in Hodgkin's Disease," Cancer Res. (Suppl.) 55:5888s-5892s, American Association for Cancer Research (December 1995)						
EXAMINER		L	<u> </u>			DATE CONS	GIDERED		

AUG 1 3 2002 SUB

FOFM PTO-1449

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.	APPLICATION NO.
0652.1910001/EKS/PSC	10/052,641
APPLICANT	-

HEIDER et al.

FILING DATE GROUP January 23, 2002 1642

					January 23, 20	002	1642	
			<u>.</u>	U	.S. PATENT DOCUMENTS	3		
EXAMINER INITIAL			UMENT BER	DATE	NAME	CLA:	SUB- CLASS	FILING DATE
	AA							
	AB							$-Q_{\lambda}$
	AC							
	AD							7 201
	AE			<u> </u>			C	M S C
	AF				2 - 10			1 6/2
	AG				120 9-11		N .	
	AH							S. M.
	AI		-					180
	ΑJ							**
	AK							
				FOF	REIGN PATENT DOCUMEN	TS		
EKAMINER INITIAL			UMENT BER	DATE	COUNTRY	CLA	SUB - CLASS	TRANSLATION
	AL							ve:
	AM							ye n
	AN							
	AO	ļ				·		Ye N
	AP							Ye N
			OTHER (Inc	luding Auth	or, Title, Date, Pe	rtinent Pages, e	tc.)	
	AR	16	Dialog Fi abstract	le 351, Acc	cession No. 91-34090 31 300 Bl (Document	8/199147, Derwen AL1)	t WPI Englis	h language
	AS Dialog File 351, Accession No. 93-136002/199317, Derwent Washington abstract for EP 0 538 754 AN (Document AM1)						t WPI Englis	h language
	AT	<u>16</u>	Dialog Fi abstract	le 351, Acc for WO 95/(cession No. 95-05223 00851 (Document AP1)	0/199507, Derwen	t WPI Englis	h language
EKAMINER			<u> </u>	<u>-</u>		DATE	CONSIDERED	